

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Federal-State Joint Board on)	CC Docket No. 96-45
Universal Service)	
)	

COMMENTS OF SPRINT CORPORATION

Sprint Corporation ("Sprint") submits its Comments to the Federal-State Joint Board on Universal Service ("Joint Board") in response to the Public Notice released on August 21, 2001, as FCC 01-J-1. In the Public Notice, the Joint Board seeks comment regarding its review of the definition of universal service.

In these comments, Sprint recommends that no changes be made to the current list of core universal services. None of the services should be removed from the list, nor should any services be added, including, high-speed services, upgraded Internet access, soft dial tone¹, prepaid calling plans, toll services or expanded area services ("EAS").

I. INTRODUCTION.

The definition of universal service is set out in Section 254(c) of the Communications Act of 1934, as amended (the "Act").² In defining the telecommunications services to be supported by the Federal Universal Service Fund ("FUSF"), the Joint Board and the Commission are required to consider the extent to which such services:

- (i) are essential to education, public health, or public safety;

¹ Soft dial tone allows an otherwise disconnected line to be used to contact emergency services.

² 47 U.S.C. §254(c).

- (ii) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers;
- (iii) are being deployed in public telecommunications networks by telecommunications carriers; and
- (iv) are consistent with the public interest, convenience and necessity.³

A list of "core" universal services was established in the *First Report and Order*. These core services are: single party service, voice grade access to the public switched network, Dual Tone Multifrequency ("DTMF") signaling or its functional equivalent, access to emergency services, access to operator services, access to interexchange service, access to directory assistance, and toll limitation services for qualifying low income consumers.⁴

II. NO CHANGES SHOULD BE MADE TO THE EXISTING LIST OF CORE SERVICES AT THIS TIME.

The existing list of core services meets the Section 254(c)(1) criteria for consideration of services to be supported by the FUSF. These services have been subscribed to by a substantial majority of customers, are currently being deployed or offered by telecommunications carriers, are consistent with the public interest, and are generally considered essential to public health and public safety.⁵ No deletion of any of the core services is warranted. Further, no additions to the list are necessary. The Joint Board should

³ Section 254(c)(1).

⁴ *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8807-25 (1997) at ¶¶56-82 ("*First Report and Order*") (subsequent history omitted).

⁵ One exception is access to toll blocking, which (understandably) has not been subscribed to by a majority of subscribers. It is, however, consistent with the public interest, and consistent with the goal of universal service. As the Commission noted in the *First Report and Order*, the reason many customers choose not to have telephone service is because of high long-distance calling charges. In certain cases it is simply easier for consumers to have no service than it is to control or curtail toll calling. The Commission stated that "Studies demonstrate that a primary reason subscribers lose access to telecommunications service is failure to pay long distance bills." (*First Report and Order* at 8993, ¶385). Hence, the Commission approved support for access to toll blocking even though it does not meet all of the criteria considered.

not recommend adding high-speed service⁶, an upgrade to voice grade service for access to the Internet, soft dial tone, or any other services at this time.

A. High-Speed Services Should Not be Added to the List of Services Supported by the FUSF.

1. High-Speed Service is Not Subscribed To By a Substantial Majority of Customers, Nor Can it Be Considered Essential.

Broadband services do not meet the second factor set forth in Section 254(c)(1), because these services have not, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers. According to the Commission's own data, at year end 2000, there were less than 8 million high-speed subscribers in total, although some form of broadband was available in zip codes housing over 97 million households and businesses. While the deployment of broadband services is proceeding apace, it is clearly not yet the case that a "substantial majority" of residential customers subscribe to it. Thus, even where broadband service is available, customers themselves have not yet deemed it essential.

Regarding high-speed services, subscribership is a crucial factor in determining whether the benefits of explicit support outweigh the costs of distorting the market mechanism. Ignoring it may lead to encouraging excess deployment that not only fails to serve the public interest but also unduly burdens consumers who are the ultimate source of funds for the FUSF. This is a key difference between providing support for basic telephone service and providing explicit support for the deployment of high-speed services: the (initial) investment decisions regarding the deployment of basic telephone services are not affected by the availability of explicit federal support. Carriers of last resort are obligated

⁶ High-Speed service is service with at least 200 kbps in at least one direction.

to build plant and serve customers. They recover their costs either through end-user charges or a combination of end-user charges plus support. But the decision to deploy the plant does not depend on, and is not affected by, the availability of support. Conversely, explicit support for advanced services could create unusual situations in which the decision to undertake the required investment is made *because of* the availability of explicit support. The logical conclusion is that high-speed service may be provided in anticipation of expected demand or even *despite* insufficient demand. In such event, end-users would literally provide dollars toward the provision of services that many customers do not need or, worse, cannot use because they have not acquired a home computer.

2. Competing Technologies Should Cause the Joint Board to Decline to Recommend Support For High-Speed Services as Not Being in the Public Interest At This Time.⁷

The FUSF was originally implemented at a time when a single technology was used to provide basic connectivity to residents and businesses across the country. As a result, this single technology made it possible to determine which areas were in fact “high-cost” areas and which residents might abandon service if required to pay cost-based prices. Today, high-speed services are offered through many competing technologies, including DSL, cable modems, fixed wireless and satellite. This creates two additional reasons why support for high-speed services is not in the public interest. First, competing technologies make it exceedingly difficult to calculate “required” support. Second, in the presence of competing technologies, explicit support could foster inefficient deployment causing market distortions.

⁷ This discussion presumes that the Commission's approach toward supporting advanced services would be some mechanism roughly consistent, in a very general sense, with its current approach.

a. Competing Technologies Make it Difficult to Calculate Required Support.

Sprint has already encountered this phenomenon in state universal service proceedings with regard to basic service. In states where wireless providers are granted ETC status, yet the size of a state fund and the associated support per line are calculated using a proxy model (such as the Commission's Synthesis Model), regulators were faced with the problem of distributing dollars to wireless providers based on wire-line costs. The problem is only made worse in the case of high-speed services; in fact, the basic justification for providing support becomes distorted. Is a high-cost area for a wire-line provider also a high-cost area for a satellite-based provider? Is there such a thing as a high-cost area to a satellite-based provider? Is the Commission prepared to produce proxy models for wire-line advanced services, fixed wireless advanced services, mobile wireless advanced services, and satellite advanced services? How is the issue of portability of support addressed? For basic telephone service, portability is, in most cases, relatively straightforward because a competing carrier receives support based on the costs it incurs (for example, in the purchase of UNEs) which are a function of the costs the incumbent carrier incurs. No such relationship exists among the costs of competing high-speed service technologies.

In fact, the prospects of simply managing a federal fund that dealt with such portability issues are something of a logistical nightmare. Assume the Commission manages to calculate support amounts per customer that vary by technology. If ten thousand customers switch from cable modems to DSL in the middle of a year, the required support amount changes. Does the size of the fund change? Do carrier assessments change?

b. With Competing Technologies, Explicit Support Could Foster Inefficient Deployment Causing Market Distortions.

As mentioned above, explicit support could create a situation where the decision to deploy high-speed services is based on an expectation of receiving that support. In such a case, a market could be served by a technology that, in the absence of support, would not be the most efficient method for serving that market. For example, it is generally accepted that the costs of wire-line broadband are density-sensitive; the closer customers are to each other, the lower the cost per customer all else held equal. Fixed wireless broadband is often considered less density-sensitive, since no physical connection is required connecting customers.⁸ Therefore, *ceteris paribus*, many remote areas could be served at a lower per-customer cost by a wireless solution. The situation could exist where a wire-line broadband provider received support in a certain rural region because of the region's high-cost nature, yet a wire-less provider would need no support because for that technology the region is not considered high-cost. It is not difficult to imagine, for purely illustrative purposes, an area where wire-line costs are more than 115% of the average cost of wire-line broadband, but wireless costs are less than 115% of the average cost of wireless broadband. In such a case, making funding available based on the wire-line provider's cost would support the "wrong" technology.

3. The E-Rate Program Has Addressed Any Need For High-Speed Services For Education and Public Health Safety Purposes.

⁸ Example: In the case of MMDS, costs per customer are essentially the same if 100 customers live within 2 miles of the tower or 4 miles of the tower. The same cannot be said for wire-line broadband.

Pursuant to Section 254(h)(2), the Commission has provided substantial funding to enhance access to advanced services for schools, hospitals and libraries. This targeted funding of high-speed services adequately addresses the education and public health and safety aspects to be considered in defining universal services. Outside of this program, it is doubtful that access to high-speed services is essential to public health and safety at this time.

4. It is Not Clear that Supporting High-Speed Service Will Result in Positive Network Externalities.

The fact that a key component of the historical justification for explicitly supporting universal telephone service may not apply to high-speed service is perhaps the most important reason for not adding it to the list of universal services. Economists have long known that there are obvious positive network externalities produced when there is universal connectivity. The standard definition of network externalities is that the value of a good or service increases when more units of that good or service are sold.⁹ Given this definition it is easy to argue that the value of telephone service is maximized when there is universal connectivity. With regard to high-speed services, however, although there are clearly benefits to individual consumers, the aggregate social welfare benefits are not as immediately identifiable. If a consumer is already connected to the Internet, it is questionable whether aggregate social welfare is increased simply because the customer can now download faster. In fact, there may be no increase in positive network externalities at all since the vast majority of potential high-speed service customers are already connected to the network and "online." Thus, the actual network of users would not expand. On the other hand, if expanded deployment of high-speed services encouraged customer who had

previously not accessed the Internet to come online, then there are real and positive network externalities produced with regard to the Internet, if not to the public switched telephone network.

While positive network externalities increase social welfare, the question is whether such an increase would be significant enough to justify interfering with the market mechanism. Sprint feels it would be worthwhile for the Joint Board and Commission to gain a better understanding of the potential role of network externalities, and whether an increase in the deployment of high-speed services is likely to expand the associated network or merely enhance convenience and the online experience for existing customers.

B. Support Should Not Be Increased to Upgrade Voice Service For Improved Internet Access.

Similar to the analysis on high-speed service, an upgrade of voice service to improve Internet connectivity is not essential to education, public health or public safety. Further, Internet access is not yet subscribed to by a substantial majority of customers. Data from TNS Telecom indicates that 40% of households have no computer at home and nearly 50% of households do not currently access the Internet from home.¹⁰ Again, it would be unreasonable to expect nearly half the customers to pay for a service they do not subscribe to. Finally, it would be difficult to administer and determine whether customers were receiving the proper speed.

C. None of the Other Services Considered By the Joint Board Should Be Added to the List of Universal Services.

⁹ See, for example, Nicholas Economides, *The Economics of Networks*, International Journal of Industrial Organization, 1996.

¹⁰ TNS Telecom, ReQuest Market Monitor Q1, 2001

The Joint Board should not recommend other services be added to the list of universal services at this time, including soft dial tone, prepaid calling plans, toll services or EAS. Soft dial tone and prepaid calling plans are both issues involving low income consumers and should be covered by the Link-Up and Lifeline programs. To the extent that Link-up and Lifeline warrant improvement, this issue should be handled in the recently issued Public Notice on these matters.¹¹

Toll services and EAS are linked together in that they both cover expansion of the local exchange area. These services are, in general, not essential to education, public health and public safety. The purpose of universal service is to ensure access to the network through the local connection. Thus, funding should and does support such access, including local voice grade service and *access* to other services such as interexchange service, directory assistance and operator service. It is essential to the public health and safety for consumers to be able to call their local school and doctor's office. In the overwhelming majority of cases, toll services and EAS are not required for customers to access essential services. In the few exceptions, specific and targeted support mechanisms, such as state support for EAS, are more efficient and less burdensome to customers overall. Therefore, broad federal support for toll services and EAS is not warranted.

III. CONCLUSION.

The Joint Board should recommend no changes to the core list of universal services at this time. The current supported services remain appropriate as defined in

¹¹ *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Public Notice, FCC 01-J-2 (released October 12, 2001).

CERTIFICATE OF SERVICE

I, Joyce Y. Walker, hereby certify that I have on this 5th day of November 2001, served a copy of the foregoing Sprint Comments “In the Matter of Federal-State Joint Board on Universal Service”, CC Docket No. 96-45, filed this date with the Secretary, Federal Communications Commission.

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Joyce Y. Walker